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PURFLEET
URBAN DISTRICT COUNCIL

ANNUAL REPORT

OF THE

Medical Officer of Health

INCLUDING THE REPORT OF THE

Sanitary Inspector

For the Year ending 31st Dec., 1934.

GRAYS.
John Higgins, Printing Contractor.

1935

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PUBLIC HEALTH OFFICERS OF THE
LOCAL AUTHORITY.

Medical Officer of Health :

W. T. G. BOUL, M.D., Ch.B. (Vict.), D.P.H.

Deputy Medical Officer of Health :

K. N. MAWSON, M.B., Ch.B., D.P.H.

Sanitary Inspector :

L. CULLISS,

Certificate Royal Sanitary Institute and Smoke
Inspector, Certified Meat Inspector, and Officer
under the Rats and Mice Destruction Act, 1919.

Chief Clerk :

R. C. GILBERT.

Clerical Assistant :

Miss P. SMITHSON.

The Medical Officer of Health is also Medical Officer of Health to the adjoining Urban Districts of Grays, Tilbury, and the surrounding Rural District of Orsett, and School Medical Inspector and District Tuberculosis Officer for these Districts.

The Deputy Medical Officer of Health is also Deputy Medical Officer of Health to the same districts, and School Medical Inspector and District Tuberculosis Officer to these districts under the Essex County Council.

PUBLIC HEALTH DEPARTMENT,
GLASSON HOUSE,
HIGH STREET,
GRAYS, ESSEX.

February, 1935.

**To the Chairman and Members of the Purfleet
Urban District Council.**

Gentlemen,

I have the honour to present to you my Sixth Annual Report upon the Health and Sanitary Circumstances of the Purfleet Urban District. In accordance with the instructions of the Ministry of Health it is a short Report, and not a survey of the work of the past five years.

Vital Statistics.—The Birth Rate at 18·1 is virtually unchanged from the previous year (18·2). The population is estimated to have decreased from 8,807 to 8,780, but the reduction of 27 is too small to need attention. A new factor enters into consideration of the Death Rate this year. A figure known as a Comparability Factor (1·05 in the case of Purfleet) is supplied by the Registrar-General, with a request that the crude Death Rate be multiplied thereby in order to make it comparable from a mortality point of view with the crude death rate of the country as a whole, or with the mortality of any other local area, the crude Death Rate of which has been similarly modified. The reason for the necessity for the Comparability Factor is given as follows. If the population of all areas were similarly constituted as regards the proportions of their sex and age-group components, their crude death rates (deaths per 1,000 population) could be accepted as valid comparative measures of the mortalities experienced by the several populations. In practice, however, populations are not thus constituted, and the crude Death Rates fail as comparative mortality indexes because the variations are due not to mortality alone but also to differences in the constitution of the populations.

The crude Death Rate of Purfleet during 1934 was 9·6 compared with 10·0 in 1933, but the Comparability Factor increases it to 10·1. The difference with so small a population is negligible.

I am pleased to say that the Infantile Mortality Rate has decreased from 50·0 to 31·4, which is the lowest in the history of the Urban District, and only approached by the 1929 Rate of 33·8

Infectious Diseases.—A total of 98 cases occurred, compared with 48 the previous year. There were 16 more cases of Scarlet Fever, and 24 more of Diphtheria, but as both diseases were fairly wide-spread throughout the country, especially the former, little comment is necessary on this point.

The housing problem has been much to the fore in the daily Press during 1934, and perusal of the relative section of this Report will show that the Council and its staff are fully alive and active in the matter.

Once again I should like to thank the members of the Council for their support during the year and especially for the kindness with which they have received any suggestions that I have made. I am confident that no official could have a more sympathetic or progressive Council, and my thanks are due to the individual Councillors for their consideration.

I also wish to thank my colleagues in other Departments, and the local Medical Practitioners, whose assistance during the year has been very much appreciated.

I am, Gentlemen,

Your obedient servant,

W. T. G. BOUL, M.D., CH.B., D.P.H.,
Medical Officer of Health.

STATISTICS AND SOCIAL CONDITIONS OF THE AREA.

The Urban District of Purfleet stands upon the northern bank of the Thames, about fifteen miles from London. It comprises the wards of West Thurrock, Purfleet, Aveley and South Ockendon, the former being industrial and the two latter agricultural areas. A certain amount of shipping trade is carried on with the factories on the river bank, while chalk quarrying and cement-making form part of the principal industries. The district appears to be attracting industries at the present time, tile and brick-making having commenced recently.

The rainfall is light and the climate equable, but heavy mists are frequent from autumn to spring, making the district unsuitable for people with rheumatic tendencies.

The chief occupations of the inhabitants are:—

- (1) Employment in Cement Factories, Quarries, Oil Works, Margarine Factories, Board Mills, &c.
- (2) Agricultural.
- (3) Transport Work.
- (4) Tradesmen and Clerical.

There is no evidence to suggest that any particular occupation exercises a deleterious effect upon the general health of the district.

Area ....	....	....	8899 acres
Population (Registrar-General's estimate) 1934			8,780
Number of Inhabited Houses at 31/12/34	....		2208
Rateable Value	....	....	£71,647
Sum represented by Penny Rate	....	....	£280

VITAL STATISTICS.

LIVE BIRTHS.		Male	Female	Total
Legitimate	....	70	83	} 159
Illegitimate	....	5	1	
Birth Rate per 1,000 of the estimated resident population				18.1

	Male	Female	Total
Stillbirths	2	4	6
Rate per 1,000 (live and stillbirths) births			36·4
	Male	Female	Total
Deaths	41	43	84
Crude Death Rate per 1,000 of estimated resident population			9·6
Corrected Death Rate as adjusted by Comparability Factor of 1·05 (see introduction to this Report)			10·1

DEATHS FROM PUERPERAL CAUSES.	Deaths.	Rate per 1000 total (live & still) Births.
Puerperal Sepsis	Nil	Nil
Other Puerperal causes	„	„

DEATH RATE OF INFANTS UNDER ONE YEAR—	
All Infants per 1,000 live births	31·4
Legitimate infants per 1,000 legitimate live births	32·7
Illegitimate infants per 1,000 illegitimate live births	Nil

DEATHS FROM—	
Measles (all ages)	Nil
Whooping Cough (all ages)	Nil
Diarrhœa (under 2 years)	Nil

The principal causes of death were :—	
Heart Disease	20 or 23·8%
Cancer	12 or 14·3%
Violence (including Suicide) ...	6 or 7·2%

AGES AT DEATH.	
Under 1 year	5
1— 2 years	Nil
2— 5 „	1
5—15 „	1
15—25 „	3
25—35 „	7
35—45 „	2
45—55 „	5
55—65 „	16
65—75 „	17
75 upwards	27
	84

Approximately 52·4% of the total deaths occurred in persons over the age of sixty-five years.

The following tables have been supplied by the Registrar-General, with the exception of the line marked * in Table No 2.

TABLE 1. CIVILIANS ONLY. CAUSES OF DEATH IN PURFLEET U.D., 1934.

Causes of Death.				Male.	Female.
ALL CAUSES				41	43
1	Typhoid and Paratyphoid fevers	...	...	—	—
2	Measles	...	...	—	—
3	Scarlet fever	...	...	—	—
4	Whooping cough	...	...	—	—
5	Diphtheria	...	...	—	1
6	Influenza	...	...	1	—
7	Encephalitis lethargica	...	...	—	—
8	Cerebro-spinal fever	...	...	—	—
9	Tuberculosis of respiratory system	...	...	—	3
10	Other tuberculous diseases...	...	...	2	—
11	Syphilis	...	...	—	—
12	General Paralysis of the insane, tabes dorsalis	...	...	—	—
13	Cancer, malignant disease	...	...	7	5
14	Diabetes	...	...	1	2
15	Cerebral hæmorrhage, &c.	...	...	3	2
16	Heart disease	...	...	12	8
17	Aneurism	...	...	—	1
18	Other circulatory diseases	...	...	—	3
19	Bronchitis	...	...	—	2
20	Pneumonia (all forms)	...	...	2	3
21	Other respiratory diseases	...	...	3	1
22	Peptic Ulcer	...	...	—	—
23	Diarrhœa, &c. (under 2 years)	...	...	—	—
24	Appendicitis	...	...	—	1
25	Cirrhosis of liver	...	...	—	—
26	Other diseases of liver, &c....	...	...	—	—
27	Other digestive diseases	...	...	1	1
28	Acute and chronic nephritis	...	...	—	2
29	Puerperal sepsis	...	...	—	—
30	Other puerperal causes	...	...	—	—
31	Congenital debility, premature birth, malformations, &c.	...	...	2	2
32	Senility	...	...	1	3
33	Suicide	...	...	2	—
34	Other violence	...	...	3	1
35	Other defined diseases	...	...	1	2
36	Causes ill-defined or unknown	...	...	—	—
Special Causes (included in No. 35 above)					
	Small-pox	...	...	—	—
	Poliomyelitis	...	...	—	—
	Polioencephalitis	...	...	—	—
Deaths of Infants under 1 year					
				Total	...
				3	2
				Legitimate	...
				3	2
				Illegitimate	...
				—	—
LIVE BIRTHS ...				Total	...
				75	84
				Legitimate	...
				70	83
				Illegitimate	...
				5	1
STILLBIRTHS ...				Total	...
				2	4
				Legitimate	...
				2	4
				Illegitimate	...
				—	—
General Register Office, Somerset House, London, W.C.2.				POPULATION	8,780.
				C.F.	1.05

BIRTH-RATES, DEATH-RATES, AND ANALYSIS OF MORTALITY IN THE YEAR 1934.

England and Wales 121 County Boroughs and Great Towns, and 135 Smaller Towns.

(Provisional figures. The rates for England and Wales have been calculated on a population estimated to the middle of 1934, but those for London and the Towns have been calculated on populations estimated to middle of 1933).

	RATE PER 1,000 TOTAL POPULATION.		ANNUAL DEATH-RATE PER 1,000 POPULATION.										RATE PER 1,000 LIVE BIRTHS.		PERCENTAGE OF TOTAL DEATHS			
	Live Births.	Still-births	All Causes	Typhoid and Paratyphoid Fever	Small-pox	Measles	Scarlet Fever	Whooping Cough	Diphtheria	Influenza	Violence	Diarrhoea and Enteritis (under Two years)	Total Deaths under One year	Certified by Registered Medical Practitioners	Inquest Cases	Certified by Coroner after P.M. No Inquest	Uncertified Causes of Death	
England and Wales ...	14.8	0.62	11.8	0.00	0.00	0.09	0.02	0.05	0.10	0.14	0.54	5.5	59	90.4	6.5	2.1	1.0	
121 County Boroughs and Great Towns, including London ...	14.7	0.66	11.8	0.00	0.00	0.12	0.02	0.06	0.11	0.12	0.47	7.4	63	90.5	6.1	2.9	0.5	
135 Smaller Towns (Estimated Resident Populations, 25,000-50,000 at Census 1931) ...	15.0	0.67	11.3	0.00	0.00	0.07	0.02	0.04	0.09	0.14	0.42	3.6	53	91.2	6.1	1.6	1.1	
London ...	13.2	0.50	11.9	0.00	0.00	0.20	0.02	0.07	0.11	0.12	0.56	12.6	67	87.7	6.3	6.0	0.0	
*Purfleet ...	18.1	0.67	9.6	0.00	0.00	0.00	0.00	0.00	0.11	0.11	0.66	0.00	31.4	88.2	8.1	2.8	0.9	

The Maternal Mortality rates for England & Wales are as follows:

{	per 1,000 Live Births ...	Puerperal Sepsis.	Others.	Total.
	„ „ Total Births ...	2.03	2.57	4.60
		1.95	2.46	4.41

COMPARISON OF VARIOUS STATISTICS.

	1931	1932	1933	1934
Population	8511	8725	8807	8780
Number of Births ...	189	168	160	159
Birth Rate	... 22·2	19·2	18·2	18·1
Death Rate	... 10·7	9·6	10·0	9·6
Infantile Mortality Rate....	79·3	41·6	50·0	31·4

GENERAL PROVISION OF HEALTH SERVICES FOR THE AREA.

1. (i.) PUBLIC HEALTH OFFICERS OF THE AUTHORITY.

The Public Health Officers of the Local Authority are enumerated at the commencement of my Report.

(ii.) (a) LABORATORY FACILITIES.

The Essex Counties Public Health Laboratories, Queen Victoria Street, London, E.C.4, undertake the examination of all bacteriological and pathological specimens.

Specimen.	No. Examined.
Diphtheria	53
Sputa	9
Miscellaneous	1
Total	63

(b) AMBULANCE FACILITIES. (1) *Infectious Disease.*

Three Motor Ambulances are maintained at the Isolation Hospital and are available immediately upon application at any hour, day or night.

1922, Ford 20 h.p. 1930, Austin, 20 h.p.
1932, Morris 20 h.p. (This is kept solely for
the use of Smallpox cases).

(2) *Non-Infectious and Accident Cases.*

The St. John Ambulance Brigade, Grays Division, maintain two Motor Ambulances and various hand vehicles.

1928, Austin 20 h.p.

1930, Ford 23 h.p.

The hire charges are very moderate and I am indebted to J. Kelley, Esq., for the following details of work during 1934 :—

	Cases.	Miles.
Road accidents	 35	630
Sick removals	 1,031	20,666

MATERNITY CASES.

These are removed where necessary by the local St. John Ambulance Brigade vehicle.

Towards the end of the year 1934 various Conferences were held between representatives of local Authorities and organisations owning Ambulances with a view to a reciprocal use of vehicles. The matter is still under discussion at the time of writing, but it is hoped that during 1935 an all-round agreement will be entered into, whereby any one district can, if necessary, secure the immediate use of all available ambulances.

(c) NURSING IN THE HOME.

(a) *General.*—There has been no alteration in the arrangements. Three District Nursing Associations serve the area. Their work is co-ordinated with that of the County Council, from whom they receive an annual grant. The 48th Nursing Division, St. John Ambulance Brigade, have also carried out some excellent work, which may be divided into the following :—

Motor Ambulance Duties	....	....	790
Hospital Home Comforts Committee	....	....	163
Orthopædic Clinic	....	....	248
Miscellaneous, including night duty	....	....	845

The Division comprises a Lady Superintendent, two Lady Ambulance Officers, and a number of Ambulance Sisters.

The Medical Comforts Committee, now in its ninth year of existence, continues to supply articles for use in a sick room at very nominal charges. The Medical Officer of Health is Chairman, and Sub-centres exist at Purfleet, Aveley, West Thurrock and South Ockendon. During 1934 a large number of articles were issued, including : Bedpans, Bedrests, Air-rings, Air-beds, Crutches, Urine bottles, Waterproof sheets, Air pillows, Hot-water bottles, Bed-cradles, Bronchitis kettles, Douche pans, Feeding cups, Invalid chairs, &c.

The Committee maintains a Register of experienced nurses, persons with nursing experience, and domestic helpers willing to attend cases of illness. Applicants for such help are placed in touch with suitable persons from the Register. This innovation has proved so popular that it has been found necessary to increase the number of persons available for such duty.



(d) CLINICS AND TREATMENT CENTRES.

ADDRESS.	HOURS.	NOTES.
MATERNITY AND CHILD WELFARE: (1) Parish Room, West Thurrock (2) British School, South Ockendon (3) Welfare Hall, Purfleet (4) Church Rooms, High Street, Aveley	1st and 3rd Mondays at 3 p.m. Medical Officer attends every 4th Monday at 2 p.m. Health Visitor attends every 2nd Monday at 2 p.m. Alternate Tuesdays at 2.30 p.m. Alternate Fridays at 2 p.m.	Nos. 1 and 2 are provided by the Essex County Council. Voluntary Centre. Voluntary Centre.
ANTE NATAL CLINIC: Parish Room, West Thurrock	2nd Monday at 2.15 p.m.	Provided by Essex County Council.
MINOR AILMENT TREATMENT CENTRE: Glasson House, High Street, Grays *EYE CLINIC: Glasson House, High Street, Grays *DENTAL CLINIC: Welfare Centre, The Park, Grays	Routine Treatment, Mondays and Fridays. Medical Officer, Wednesdays at 9.15 a.m. Tuesday 9.15 a.m., and as required. Mondays, Tuesdays and Thursdays, at 9.15 a.m.	Provided by Essex County Council, the Medical Officer of Health, as School Medical Inspector, supervising the Work.
*ORTHOPÆDIC CLINIC—Surgeon's Clinic AFTER-CARE CLINIC: Glasson House, High Street, Grays	By arrangement—at intervals of about two months. Tuesdays and Fridays. 2nd and 4th Wednesdays at 2 p.m.	Clinics provided jointly by Essex County Council and Grays, Orsett, and Tilbury Councils.
*DIPHTHERIA IMMUNISATION CLINIC: Welfare Centre, The Park, Grays	2nd and 4th Wednesdays at 2 p.m.	Clinic provided by Grays U.D. Council. Purfleet patients treated under agreement.

TUBERCULOSIS DISPENSARY: 59 London Road, Grays	Mondays, 4 to 6 p.m. Thursdays, 10 a.m. to 12 noon.	Provided by Essex County Council.
VENEREAL DISEASES: 22 Cobham Street, Gravesend	Men—Medical Officer, Tuesdays, 11 to 1 p.m. Thursdays, 5 to 6.30 p.m. Intermediate Treatment— Daily, 5.30 to 7 p.m. Saturdays, 12.30 to 2 p.m. Women—Medical Officer, Tuesdays, 1 to 2.30 p.m. Thursdays, 3 to 5 p.m. Intermediate Treatment— Mondays, 9 to 12 noon, and 1 to 5 p.m. Wednesdays, 9 to 12 noon. Fridays, 9 to 12 noon, and 1 to 5 p.m. Saturdays, 9 to 12 noon.	Provided by Kent County Council. Essex patients treated by agreement.
*WOMEN'S WELFARE CENTRE: Welfare Centre, The Park, Grays	1st Thursday in each month at 6 p.m.	Clinic provided by Grays U.D. Council. Patients from Purfleet area treated by arrangement with Essex County Council.

* Patients attend these Clinics by appointment only. Applications must be made to the Public Health Department.

(e) **HOSPITALS.**

There have been no changes in the Hospital services of the area.

Seamen's Hospital, Tilbury Docks.

Accommodation—Men	-	52 beds.
Women	-	24 „
Children	-	16 „

The Hospital is equipped with X-ray, dental and ophthalmic apparatus, and I wish once again to record my appreciation of the kindly co-operation extended to this Department by the staff. The Medical Officer of Health is a member of the consultant staff, and I am indebted to the Secretary of the Seamen's Hospital Society for the following statistics relating to the Hospital :

Number of In-patients	-	-	1229
„ Out-patients	-	-	4274
„ Major operations	-	-	341
„ Minor operations	-	-	852

Orsett Public Assistance Institution.

The accommodation at this establishment has been increased to the following totals :

General Medical	-	-	126 beds
„ Surgical	-	-	37 „
Tuberculosis	-	-	15 „
Children	-	-	27 „
Maternity	-	-	7 „
Mental (observation)	-	-	8 „
Isolation	-	-	6 „

Orsett Joint Hospital Board, of which Purfleet Urban District Council is a constituent authority, maintains :

- (1) Isolation Hospital, Stifford Long Lane, Grays, 96 beds.
- (2) Smallpox Hospital, Stifford Long Lane, Grays, 22 beds.

The former is being enlarged by the construction of a convalescent and discharge block containing two 4-bed wards, day room and duty room.

These additions are estimated to cost £2,450 and are expected to be ready for use early in the summer of 1935.

Owing to the proximity of the district to the Metropolis, a large number of persons attend various London Hospitals. Most of the firms in the district maintain Benevolent Funds or branch groups of the Hospital Savings Association, and arrangement of treatment is a fairly simple matter.

MATERNITY AND CHILD WELFARE.

All services under this heading are administered by Essex County Council.

ANNUAL REPORT OF THE
SCHOOL MEDICAL INSPECTOR

*for the Orsett Sub-District, for the year ending
31st December, 1934.*

STAFF.

There was one change in the personnel from 1933. Dr. C. Ive resigned on 31/12/33, and was succeeded on the 1st January, 1934, by Dr. K. N. Mawson, who has rendered valuable help during the year. I am indebted, also, to Drs. A. A. Park and F. A. Nelson for their continued loyalty and support.

CLINICS.

In the 1933 Report I mentioned that the establishment of a Minor Ailment Clinic at Aveley was under attention. I am glad to say that in 1934 it became an accomplished fact, the first session being held on the 19th February. Minor Ailments Clinics now exist at Grays, Tilbury, Stanford-le-Hope, Aveley and Laindon (for Langdon Hills Cases).

ACCOMMODATION.

The Department was transferred to new premises at Glasson House, High Street, Grays, early in September, the old offices at Quarry Hill being required for an extension to the Juvenile Employment Bureau. The new premises are much more commodious. All treatment clinics are situated in separate rooms on the ground floor, and an adequate waiting room adjoins the entrance hall. An entrance to the building has recently been constructed from York Road, Grays, which is a quiet, traffic-free cul-de-sac, and this will remove the only objection which existed formerly, whereby children had to traverse the most congested and dangerous portion of the High Street, i.e., adjoining the railway level-crossing, to reach the Clinic.

SPECIAL BRANCHES OF SCHOOL MEDICAL WORK.

These include the Open-Air School, Sight-Saving Class, and the Special School for mentally-retarded children. Details thereof will be found elsewhere in this Report.

TONSILS AND ADENOIDS CLINIC.

Number of cases operated upon :—

1930	...	...	92
1931	....	....	151
1932	....	....	210
1933	....	....	81
1934	....	....	96

In addition, a number of letters of recommendation for free treatment in necessitous cases were issued, and I am indebted to Dr. L. G. McQueen and the staff of the Seamen's Hospital, Tilbury, for their continued co-operation in this direction. Thanks are due also to Drs. Barrow and Hawes for their services during the year.

SPECIAL SCHOOL FOR MENTALLY-RETARDED CHILDREN.

This is situated at Bridge Road School, Grays. Handicraft and Gardening form an important part of the curriculum.

		M.	F.
Number on Register at 1/1/34	....	25	24
„ „ „ at 31/12/34	....	24	25
„ admissions during year	....	6	8
„ discharges „ „	....	7	7

Reasons for Discharge.

Attained age of 16 years	....	4	3
Removed from district	...	1	2
Ineducable	....	1	—
Admitted to Institutions	....	1	1
Other reasons	....	—	1

SIGHT-SAVING (MYOPE) CLASS—(Quarry Hill, Grays)

			M.	F.
Number on Register at 1/1/34	....		9	9
„ „ „ 31/12/34	....		8	6
„ admitted during year	....		1	—
„ discharged	....	....	2	3

Reasons for Discharge.

Obtained employment	....	....	1	—
Left district ...	....	....	—	2
Attained age of 14 years	....	....	1	—
Returned to Elementary School	....	....	—	1

Classification of Defects :

High myopic astigmatism	....	....	4	1
High myopia ....	....	....	—	1
Myopic astigmatism	....	....	1	—
Myopia ....	....	....	1	2
Congenital cataract	....	....	1	—
Congenital dislocation of both lenses...	....	....	—	2
Albino-nystagmus	....	....	1	—

MINOR AILMENT TREATMENT CENTRES.

No. of individual children
treated—

			Grays.	Tilbury.	Stanford- le-Hope.	Aveley.
1931	....	....	1245	1261	—	—
1932	....	....	1233	2744	114	—
1933	....	....	1281	2171	245	—
1934	....	....	1470	2311	346	185

Total Attendances—

1931	....	....	3332	3697	—	—
1932	....	....	3035	4394	160	—
1933	....	....	3166	4846	385	—
1934	....	....	3888	5303	561	225

SCHOOL SPRAY BATHS.

Total attendances—

			Grays.	Tilbury.
1931	....	....	2664	4601
1932	....	....	2989	5611
1933	....	....	3594	9377
1934	....	....	1560	7179

The Grays Baths were closed from July to the 1st December owing to the illness of the attendant. A temporary attendant was provided at Tilbury during this period.

VERMINOUS SCHOOL-CHILDREN.

For many months the Girls' Department of one school in the South Ward of Tilbury has given great trouble to this Department owing to the prevalence of vermin amongst the children. At one inspection performed by the School Medical Inspector, about 50% of the Department, numbering about 360 children, were found to be verminous. The usual methods of cleansing proved of little avail, and a special report on the matter was submitted to the Orsett District Sub-Committee, who agreed to prosecute all persistent defaulters. Since that date an inspection of the Department has been carried out by a School Medical Inspector about once a week. Verminous children are excluded and the parents requested to put them into a cleanly condition by a certain date. If upon re-examination they are still verminous they are again excluded and the parents warned that prosecution will follow a third default. If this warning is of no use, recommendations for prosecution are forwarded automatically to the Clerk to the Education Sub-Committee. A large number of cases have been prosecuted during the past year, and in the greater majority of them orders to cleanse the children have been issued, orders made against the parents for costs, and in many cases fines have been imposed. For some time even this course produced little improvement, and the Grays magistrates warned a number of defendants that continuation of the offence would lead to a more severe penalty being inflicted. Since that warn-

ing the number of persistently verminous cases has been reduced to about 20, but fear of the legal consequences of uncleanness rather than a distaste for vermin has brought the numbers down. The Department maintains an unceasing vigilance over the school in question.

OPEN AIR SCHOOL.

No. of places in the School	....	60
„ admissions during 1934	....	36
„ discharges „ „	....	40
Admissions recommended by—		
School Medical Inspectors	....	28
Tuberculosis Officer	....	7
Other sources ....	....	1
Reasons for discharge—		
Returned to elementary school	...	25
Left district	...	6
Attained school-leaving age	....	5
Unsuitable for open air treatment	....	3
Transferred to Convalescent Home	....	1
	M.	F.
Average increase in height	... 2 in.	2½ in.
„ „ weight	 4½ lbs.	5½ lbs.
Highest increase in weight	 10 lbs.	9 lbs.

The admissions during 1934 have been of very poor physical type, poorly clad, and showing marked signs of debility and malnutrition. For the first two months of open air school treatment these children make little headway, but the response after that has been remarkably good. The average increase in weight per head over a period of about eight months has been 8½ lbs. for girls, and 6 lbs. for boys, followed by increases of up to 3 lbs. per month. This indicates, as in previous years, that the routine of the school is based on sound lines.

The increased accommodation mentioned in the 1933 Report has not yet been commenced, and it is hoped that the matter will not be deferred too long. At present, cases of the chronic type have to be discharged

at intervals to make room for children who need a short "building-up" course. The former type are out of place in ordinary elementary schools, but it is obviously unfair for them to occupy for an indefinite period places which could be used to greater advantage by the latter type. If and when the school is enlarged it is hoped to accommodate both categories.

Once more I have pleasure in acknowledging the efforts of the Head Teacher and staff, to whose zeal and ability much of the success of the establishment is due.

EYE REFRACTION CLINIC.

Drs. Mawson and Nelson have performed excellent work under this heading, and with the appointment of an Ophthalmic Specialist in the person of Mr. Aherne even better facilities will be available for children during 1935.

		Refractions.	Glasses Advised.
1930	....	251	133 or 53%
1931	...	283	232 „ 82%
1932	....	369	295 „ 80%
1933	....	427	349 „ 82%
1934	....	556	484 „ 87%

DENTAL TREATMENT.	1931.	1932.	1933.	1934.
Children treated....	1240	1443	2030	2119
Total attendances	1365	1544	2135	2226

Extractions.

Permanent	....	469	582	764	865
Temporary	....	2704	2653	3476	3452

Fillings.

Permanent	....	138	277	727	675
Temporary	....	91	30	36	65
Gas cases	....	934	1000	1413	1578
Local Anæsthetics	—		144	258	110
Operations	....	28	70	69	29

Mr. S. K. Donaldson, School Dental Surgeon, reports that of the total number of children inspected by him over 68% were found to require attention, but that less than 22% actually accepted treatment. This response, he says, is extremely poor and is to be

accounted for in two ways. Parents do not understand the value of conservation work (i.e., prevention of decay by means of fillings, &c.) and still tend to pin their faith in extractions when the teeth are too far decayed to be saved. Also, at ordinary medical inspections carried out without the aid of a Dental Surgeon in the past, it has not been possible to detect all defects in the very early stages, so that extraction has been the only remedy. Mr. Donaldson describes the large proportion of refusals of treatment as neglect on the part of the parents, and advocates intensive propaganda efforts in this direction.

DENTAL INSPECTIONS.

School.	Inspected.	Age Groups		Offered Treatment.
		5-10	10-14	
Quarry Hill Girls' ...	305	172	133	232
„ „ Boys'	390	193	197	290
Langdon Hills	337	291	46	223
St. Chad's ...	512	288	224	362
Stanford-le-Hope	297	216	81	231
Special School, Myope Class and Open Air School	294	255	39	226
Arthur Street	286	96	190	212
Stanford-le-Hope R.C.	472	289	183	327
Corringham	274	199	75	193
Arthur Street Girls'	180	89	91	141
West Thurrock	447	293	156	284
Orsett	191	119	72	131
Bulphan ...	69	43	26	45
Lansdowne Road	609	461	148	401
Stifford ...	339	255	84	177
Chadwell Mixed	364	254	110	249
Intermediate	363	24	339	227
Stifford Infts. & Mixed	68	31	37	41
North Ockendon	46	27	19	29
South Ockendon	205	146	59	156
Grays R.C.	226	158	68	147
East Tilbury	50	28	22	37
East Thurrock	506	398	108	345
Horndon	151	103	48	98

SANITARY CIRCUMSTANCES OF THE AREA.

1. (i) WATER.—The greater portion of the district is supplied by the South Essex Waterworks Company. The supply has been adequate and satisfactory. Laboratory reports indicate that the water is pure and stable in character, but somewhat hard, up to 26 degrees of hardness being reported. There are a few wells in the outlying parts of the area and they are subject to periodical inspection. During the year no samples were taken from these wells.

(ii.) DRAINAGE AND SEWERAGE.—The major part of the area is connected to the Thurrock, Grays and Tilbury Joint Sewerage Board's mains, the Ward of South Ockendon being almost the only portion of the district not so connected, but arrangements have been made to connect this Ward at any time should circumstances necessitate such action. The Joint Sewerage Board possesses Disposal Works, complete with Sedimentation Tanks and Circular Revolving Distributors on Bacterial Beds. I am indebted to the Works Manager for the under-mentioned details:

Year.		Number of Gallons Pumped.
1930	....	468,993,000 gallons
1931	....	461,529,500 „
1932	....	452,451,000 „
1933	....	466,862,000 „
1934	....	468,755,000 „
Average daily flow	-	1,284,260 „

2. RIVERS AND STREAMS.—The chief stream is the Mardyke, which rises above Bulphan and Orsett Fens, proceeds through Stifford and thence into the Urban District, forming a boundary between Aveley and West Thurrock.

Samples are taken at intervals by the Port of London Authority, but no complaints re pollution have been received.

3. (i.) CLOSET ACCOMMODATION.

Conversions :

Privies to Pail Closets	-	-	1
No. of Cesspools in the Urban District	-		36
„ Pail Closets „ „ „ „	-		56

With one exception all cesspools and pail closets are inaccessible so far as the Council's sewers are concerned, and as no nuisance has arisen from them no steps have been taken to enforce conversion.

(ii.) PUBLIC CLEANSING.

This is carried out by contract under the administration of the Department. The system adopted may be described as a semi-Bradford scheme. The refuse is collected by a modern "Rord" refuse collection lorry equipped with automatic dust doors and hydraulic tipping gear, and transported to a large depression, formerly a sand and ballast quarry, situated on the west side of the Barking-Purfleet arterial road. Here it is discharged and after undergoing preliminary sorting by a whole-time employee of a London firm of salvage contractors, is levelled off and covered. Payment for this service is offset by the privilege of sorting and retaining salvable articles. This arrangement works very well, as service for rat suppression is included, and in this connection it should be noted that by a combined system of baiting and trapping the site is maintained in a condition which may be regarded with satisfaction.

The byelaws controlling this branch of Public Service are administered by the Public Health Department, a circumstance much appreciated by the officers concerned. Ancillary to the process of refuse collection, a small waste-paper baling plant has been installed at the disposal site, and I am pleased to report that this scheme, having paid for the installation costs, continues to show a small monthly profit.

Bakehouses.— There are five Bakehouses within the Urban District, to which periodic visits are made. These premises are maintained in a cleanly state, and mechanised mixing is used, without exception. The

Sanitary Inspector has experienced slight difficulty in regard to the maintenance of cleanliness in one instance, but there has been no necessity to resort to other than informal measures.

(iii.) **SANITARY INSPECTION OF THE AREA.**

VISITS MADE.—DESCRIPTION.			Number.
Dwelling-houses	....	....	1730
Factories and Workshops	....	....	70
Slaughterhouses	....	....	470
Cowsheds, Dairies and Milkshops	....	....	57
Bakehouses	....	....	17
Visits to Infectious Diseases premises	....	....	68
Shops (General)	....	....	79
Fried-Fish Shops	....	....	27
Butchers ...	....	....	415
			<u>2933</u>

NOTICES SERVED.

	Served.	Complied With.	Outstanding.
Informal	346	338	8
Statutory	Nil	Nil	Nil
	346	338	8

LIST OF WORKS EXECUTED.

Rooms in which defective plaster repaired	...	76
Defective firegrates repaired or renewed	....	30
Floors repaired	....	20
Damp walls remedied	....	45
Repairs to windows, &c.	....	69
Walls cleansed	....	69
New sinks provided	....	5
Individual water service provided	...	1
Defective roofs repaired	....	48
Yard paved....	...	5
External walls treated	....	29
Eaves, gutters and downspouts repaired	...	25
Dustbins provided	....	72
Sundry defects remedied	....	247

FACTORIES, WORKSHOPS AND WORKPLACES.

(a) INSPECTIONS OF FACTORIES, WORKSHOPS & WORKPLACES including Inspections made by Sanitary Inspector.

Premises.	In- spections	Written Notices	Occupiers Prose- cuted
Factories (Including Factory Laundries)	44	3	—
Workshops (Including Workshop Laundries)	14	—	—
Workshops (Other than Outworkers premises)	12	—	—
Total	70	3	—

(b) DEFECTS FOUND in Factories, Workshops and Workplaces.

Particulars.	Number of Defects.			Number of Offences in respect of which Prosecutions were Instituted
	Found.	Rem- edied	Referred to H.M. Inspector	
<i>Nuisances under the Public Health Acts —</i>				
Want of cleanliness ...	—	—	—	—
Want of ventilation ...	—	—	—	—
Overcrowding ...	—	—	—	—
Want of drainage of floors ...	—	—	—	—
Other nuisances ...	—	—	—	—
Sanitary accommodation—				
Insufficient ...	2	2	—	—
Unsuitable or Defective ...	1	1	—	—
Not separate for sexes ...	—	—	—	—
<i>Offences under Factory & Workshops Acts—</i>				
Illegal occupation of underground bakehouses (s.101)....	—	—	—	—
Other Offences ...	—	—	—	—
[Excluding offences relating to outwork, and offences under the Sections men- tioned in the Schedule to the Ministry of Health (Factories and Workshops Transfer of Powers) Order, 1921]				
Total ...	3	3	—	—

(iv.) SMOKE ABATEMENT.

Complaints still continue to be received concerning the amount of grit, ash and sulphurous fumes emitted by various chimney stacks in the Urban District, and the Public Health Committee and this Department have spent a considerable amount of time in investigating possible remedies. During the year a new chimney and plant was installed at one Cement Factory, which has had some effect in removing dust and fumes from the immediate locality. The subsequent progress of this experiment is being watched with much interest.

4. SCHOOLS.

The supervision of local schools is much simplified by the fact that the Medical Officer of Health is School Medical Inspector under the Essex County Council. The sanitary condition of the premises is generally satisfactory, and minor defects usually receive prompt attention.

HOUSING.

From time to time in previous Reports I have expressed my views on the housing of the district, and in the present year I do not propose to elaborate upon this matter. Since the formation of the Urban District a very large amount of housing work has been carried out, and I think I may safely report to you that there is little or no overcrowding in the district, and that the position in regard to the unfit houses is extremely satisfactory. From 1929 onwards a substantial number of houses have been closed or demolished by my Department, and with very few exceptions all the remaining properties in the district have been repaired and made fit, or are the subject of notice.

Your Sanitary Inspector is to be congratulated on the work he has carried out during the past few years on this matter. The district had at its formation many old and insanitary cottages, which have now been

disposed of, and I do not think that there are many Local Authorities in the country who have given the housing problem so much attention as your own.

Some cottages in South Ockendon were the subject of long-drawn-out litigation in the County Court under the Housing Act, 1930. After two adjournments, one at Grays and the other at Ilford, the case was finally heard at Grays. The proceedings concerned some ancient and highly dilapidated cottages which in the opinion of the Local Authority could not be rendered fit for habitation at a reasonable cost. Indeed, the cost of repairs was estimated by an independent surveyor to amount to much more than the value of the premises, but the owner expressed willingness to carry out the necessary repairs, including wholesale structural alterations, and the Court directed that his offer be accepted.

HOUSING STATISTICS.

1. INSPECTION OF DWELLING-HOUSES DURING THE YEAR.

- | | | |
|---|------|-----------|
| (1) (a) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts).... | .... | .... 470 |
| (b) Number of inspections made for the purpose | .... | .... 1730 |
| (2) (a) Number of dwelling-houses (included under sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925 | .... | .... 314 |
| (b) Number of inspections made for the purpose | .... | .... 314 |
| (3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation | .... | Nil |
| (4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation | .... | .... 346 |

2. REMEDY OF DEFECTS DURING THE YEAR WITHOUT SERVICE OF FORMAL NOTICE.

Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their officers ... 338

3. ACTION UNDER STATUTORY POWERS DURING THE YEAR :

(A) *Proceedings under Secs. 17, 18 & 23 of the Housing Act, 1930.*

(1) Number of dwelling-houses in respect of which notices were served requiring repairs Nil

(2) Number of dwelling-houses which were rendered fit after service of formal notices :

(a) By Owners Nil

(b) By Local Authorities in default of owners Nil

(B) *Proceedings under Public Health Acts :*

(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied Nil

(2) Number of dwelling-houses in which defects were remedied after service of formal notices :

(a) By Owners ... Nil

(b) By Local Authority in default of owners Nil

(C.) *Proceedings under Secs. 19 & 21 of the Housing Act, 1930 :*

(1) Number of dwelling-houses in respect of which Demolition Orders were made ... 2

(2) Number of dwelling-houses demolished in pursuance of Demolition Orders 2

(D) *Proceedings under Sec. 20 of the Housing Act, 1930:*

- (1) Number of separate tenements or underground rooms in respect of which closing Orders were made Nil
- (2) Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement or room having been rendered fit Nil

Towards the end of 1934 a report was submitted to the Council upon various methods of disinfecting verminous premises and furniture. These included the disinfestation of rooms, temporarily vacated by the tenant and his family, by orthodichlorbenzine, and also the removal of furniture to a central disinfestation plant and the treatment of the empty premises before occupation.

As a preliminary step it was agreed that steps be taken to experiment upon the efficiency of orthodichlorbenzine disinfestation upon site over a period of six months. At the time of writing this Report (February, 1935), the trial period has not expired, so that the final results cannot be reviewed, but experience so far indicates that orthodichlorbenzine does not give an efficient result. Several strengths of solution were used, but in each case live bugs were found within 24 hours after disinfestation, and in some instances eggs taken from the treated rooms hatched out. The smell of the chemical was retained in the premises for several days.

There seems little doubt that at the end of the experimental period attention will have to be directed to alternative and more efficient methods.

INSPECTION AND SUPERVISION OF FOOD.

A. MILK SUPPLY.

No. of Milk Producers Registered	....	7
„ Inspections made	....	57
„ Defects remedied	....	1
„ Producers of Grade “A” Milk	....	1
„ Dairies	....	7
„ Milkshops (at which unsealed milk is sold)		7
„ Inspections made	....	26
„ Retailers of Grade “A” Milk	...	2
„ „ „ „ (T.T.) Milk	....	1
„ „ „ „ Pasteurised Milk	....	

The conditions under which milk is handled in the Urban District are satisfactory. Samples were taken from various producers and retailers. (See following Table).

No.	Designation.	Date Sampled.	Bacterial count. per c.c.	B. Coli present in c.c.
1	Ordinary	20th April	8,300	0.1 c.c.
2	„	30th May	21,000	Absent in 1 c.c.
3	„	30th May	9,600	„ „ 1 c.c.
4	„	18th June	65,000	0.1 c.c.
5	„	18th June	42,000	Absent in 1 c.c.

These are all very good results indeed, and the freedom from manurial contamination, indicated by the low B. Coli count, is a sign that cleanliness is exercised in the cowsheds.

B. MEAT AND OTHER FOODS.

No. of Slaughterhouses Licensed	....	5
„ „ Registered	....	Nil
„ Inspections made	....	470
„ “Occasional Slaughter” Notices		449

		Slaughtered.	Inspected.
No of cattle	....	299	291
„ calves	....	43	40
„ sheep	....	1470	1420
„ swine	....	876	864
	Total	2688	2615 or 97.3%

UN SOUND FOOD SURRENDERED.

Meat (approximately)	....	....	1594 lbs.
Fish	..	....	60 lbs.
			1654 lbs.

C. ADULTERATION.

The Essex County Council is the Authority under the Foods and Drugs (Adulteration) Act, 1928 ; the Artificial Cream Act, 1929 ; the Public Health (Condensed Milk) Regulations, 1923 and 1927, and the Public Health (Preservatives, &c. in Food) Regulations, 1925 and 1927.

D. CHEMICAL AND BACTERIOLOGICAL EXAMINATION OF FOOD.

This is carried out at the instance of the Essex County Council by the Counties Public Health Laboratories, Queen Victoria Street, London, E.C.4.

E. NUTRITION.

Periodical articles upon diet, nourishment and general health are contributed to the local Press by the Medical Officer of Health.

**PREVALENCE OF, AND CONTROL OVER,
INFECTIOUS AND OTHER DISEASES.**

Notifiable Diseases (other than Tuberculosis) during 1934

DISEASES.		Total Cases Notified.	Cases Admitted to Hospital	Total Deaths.
Scarlet Fever ...	....	48	33	—
Diphtheria	...	28*	27*	1
Puerperal Pyrexia	....	2	—	—
Pneumonia ....	....	7	—	3
Erysipelas ....	....	5	1	1
		90	61	5

* Includes two cases wrongly diagnosed.

The district remains comparatively free from infectious disease, especially when it is remembered that there is a large daily influx of workers from other areas into the Urban District.

DIPHTHERIA.

The actual number of cases confirmed was 26, of which only one remained at home. This is an increase of 22 over the previous year.

SCARLET FEVER.

There were 16 cases more than in 1933. The disease was prevalent throughout the country, and no special measures were necessary to prevent its spread in the Urban District. The policy of isolating patients at home, where possible, instead of removing them to hospital, continues to justify itself, no evidence being available that secondary cases occur in households where reasonable precautions are taken against the spread of infection.

INCIDENCE OF INFECTIOUS DISEASE AT VARIOUS AGES.

Age Groups.				Scarlet Fever.	Diphtheria.	Puerperal Pyrexia.	Pneumonia.	Erysipelas.
Under 1 year	...	...	...	...	...	...	...	...
1—2 years	...	...	...	1	...	...	...	...
2—3 „	...	...	...	4	...	...	...	...
3—4 „	...	...	...	4	2	...	1	1
4—5 „	...	...	...	4	5	...	...	...
5—10 „	...	...	...	25	14	...	2	...
10—15 „	...	...	...	7	3	...	...	...
15—20 „	...	...	...	...	2	...	...	...
20—35 „	...	...	...	3	2	2	1	...
35—45 „	...	...	...	...	...	...	1	2
45—55 „	...	...	...	...	...	...	1	1
55—65 „	...	...	...	...	...	...	...	1
65 upwards	...	...	...	...	...	...	1	...
Total	...	...	...	48	28	2	7	5

ALLOCATION OF INFECTIOUS DISEASES TO WARDS :

Ward.	Scarlet Fever.	Diphtheria.
Aveley	 9	2
Purfleet....	 15	14
South Ockendon	 3	—
West Thurrock	 21	12

I am very glad to report to you that arrangements have now been made for children to be immunised against Diphtheria by the Schick method. The Council have entered into arrangements with the Grays and Tilbury Urban District Councils for children between the ages of 1 and 14 years to receive treatment at the latter's Clinics, and it is anticipated that the facilities will commence early in 1935. No fee will be charged to parents, but Purfleet Council will pay a fixed charge of 5/- per head to the appropriate Councils for each case treated.

Anti-toxin is available upon application either at the Public Health Department, the Council Offices, Purfleet, or the Police Station, Grays.

3. (a) CANCER.

There were 12 deaths during the year.

AGE GROUPS.			
55-65 years	....	....	4
65-75 „	....	....	5
75 and over	....	....	3

(b) PREVENTION OF BLINDNESS.

No action has been taken under Section 66 of the Public Health Act, 1925.

TUBERCULOSIS.

NEW CASES AND MORTALITY DURING 1934. (LOCAL RECORDS.)

Age Groups.	New Cases.				Deaths.			
	Pulmonary		Non-Pulmonary		Pulmonary		Non-Pulmonary	
	M.	F.	M.	F.	M.	F.	M.	F.
Under 1 year	...	...	...	...	...	...	1	...
1—5 years	...	...	...	...	...	...	...	...
5—15	...	...	3	2	...	...	...	...
15—25	...	1	...	1	1	...	...	...
25—35	...	2	1	...	1	2	...	...
35—45	1	1*	...	...	...	1*	...	...
45—55	...	...	...	...	...	...	...	...
55—65	...	...	...	...	...	...	...	...
65 years upwards	...	...	...	...	...	...	...	...
	2	4*	4	3	2	3*	1	...
	6	7	5	1				

* Indicates one unnotified case.

I patient died within 2 days of notification.

1	„	„	„	2 months	„
1	„	„	„	10 „	„

DEATH RATE FROM TUBERCULOSIS (all forms).

1929	....	0·71 per 1,000 population.
1930	....	0·98 „ „
1931	....	0·58 „ „
1932	....	0·46 „ „
1933	....	1·25 „ „
1934	....	0·68 „ „

PUBLIC HEALTH (PREVENTION OF TUBERCULOSIS) REGULATIONS, 1925, AND PUBLIC HEALTH ACT, 1925, Sec. 62.

No action has been taken under these headings.

VENEREAL DISEASE.

The arrangements were detailed in my Report for 1932. I wish once again to acknowledge my indebtedness to Drs. H. Nicol and R. Erskine Grey for their co-operation in regard to the treatment of Essex patients. Essex County Council offer every encouragement to patients to attend the Clinic at 22 Cobham Street, Gravesend, but there is no doubt that the somewhat complicated journey involved, especially from the outlying parts of the district, acts as a deterrent to many persons who would otherwise attend. In my Report for 1933 I stated that, in my opinion, the time has come when the desirability of establishing a Clinic on the Essex side of the Thames should be considered.

During 1934 the Essex County Council went into the matter, and efforts were commenced to provide a Venereal Disease Clinic on the north bank of the river. The matter apparently presented certain administrative difficulties, which at the time of writing have not been

overcome. The need for more convenient premises is likely to prove greater than ever during the next two years, and it to be hoped that a satisfactory solution will be reached fairly soon.

The following is a summary of the Clinic during 1933.

Total Patients Receiving Treatment :

			Male	Female	Total
Syphilis	....	....	171	95	266
Soft Chancre	....	....	12	—	12
Gonorrhœa	...	....	248	53	301
Non-specific V.D. and Non-V.D.			38	29	67
			469	177	646

New Patients :

Syphilis	....	....	38	26	64
Soft Chancre	....	....	10	—	10
Gonorrhœa	....	....	103	32	135
Non-specific V.D. and Non-V.D.			37	25	62
			188	83	271
Re-admissions		....	23	2	25
			211	85	296

New Patients by Areas (exclusive of Re-admissions) :

		Gravesend.		Rest of Kent		Essex.		Other Areas,		Total.	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Syphilis	...	14	11	5	2	5	12	15	1	36	38
Soft Chancre	...	4	—	2	—	3	—	1	—	10	—
Gonorrhœa	...	34	16	19	10	30	6	20	—	103	32
Non-Specific V.D. and Non-V.D		14	8	7	7	13	10	3	—	37	25
		65	35	33	19	51	28	39	1	188	83

Attendances by Areas :

		Gravesend.	Rest of Kent.	Essex.	Other Areas.	Total.
Male	....	3271	2634	1623	242	7770
Female	....	3030	639	955	1	4625

Total Attendances :

	Male	Female	Total
For Medical Officer	 2738	2141	4879
For Intermediate Treatment	5032	2484	7516
	7770	4625	12395

Discharged Cured :

	Male	Female	Total
Syphilis	 32	7	39
Soft Chancre	 10	—	10
Gonorrhœa	 72	20	92
Non-specific V.D. & Non-V.D.	36	26	62
	150	53	203

